

Work Order ID 137337

137337

Thursday, September 24, 2015 1:31:34 PM

Page 1

Item ID: D2535

Revision ID:

Item Name: Spring

Start Date: 9/23/15

Start Qty: 25.00

Required Date: 9/23/15

Req'd Qty: 25.00

Reference:

Accept

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan: MLJ

Date: SEP 25 2015

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2535	Rev A								

100

100

Purchasing

Purchasing

PURCHASING

Memo

Issue P/O: 29931 Possible Supplier: Victoria Spring, 0.070 SS Torsion Spring

0.00

0.00

CL

SEP 29 2015

50

110

110

Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

Ensure Material Release Note is attached

0.00

0.01

DAS
6
9-89

50

OCT 20 2014

120

120

QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

Check dims to dwg

0.00

0.00

50

DAS
38
9-89

OCT 20 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Work Order ID 137337***137337***

Page 2

Thursday, September 24, 2015 1:31:34 PM

Item ID: D2535 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Spring
Start Date: 9/23/15 Start Qty: 25.00 ***25*** Cust Item ID:
Required Date: 9/23/15 Req'd Qty: 25.00 ***25*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>S/008</u>	0.00							
130									
Packaging	Memo	0.00				80	27 9-89		
Packaging									
									OCT 19 2015
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.04							
Quality Control									

15/10/2015

20151020

5/11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
☐ OTHER : _____					

Picklist Print

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Page 1

Work Order ID: 137337

137337

Parent Item: D2535

D2535

Parent Item Name: Spring

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 25.00

Required Qty: 25.00

Comments: IPP A99.04.19New Issue (From hand written IPP)DM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2535P		Purchased	No			100	Each	0.0000	1	25 30			
D2535P										**			
Spring													

OCT 20 2014

68-6
9
SVD

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

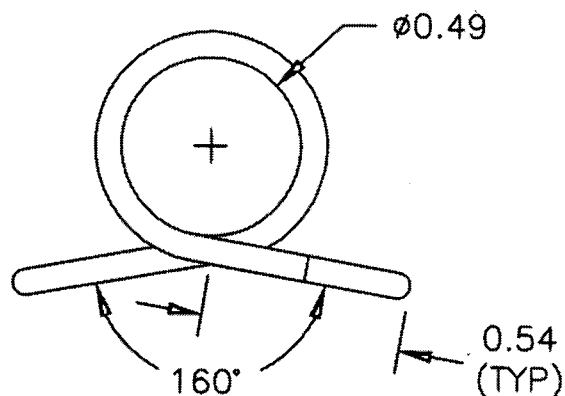
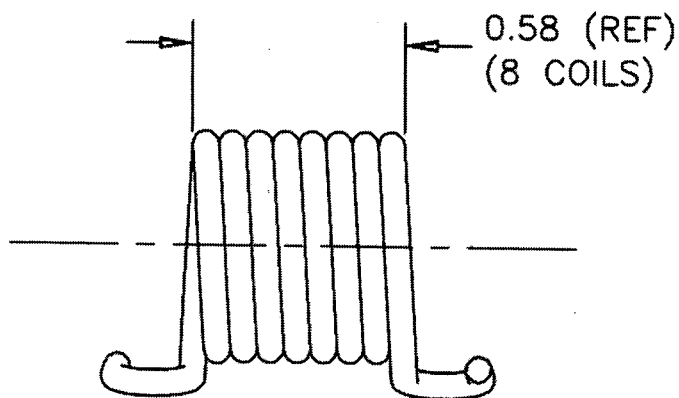
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

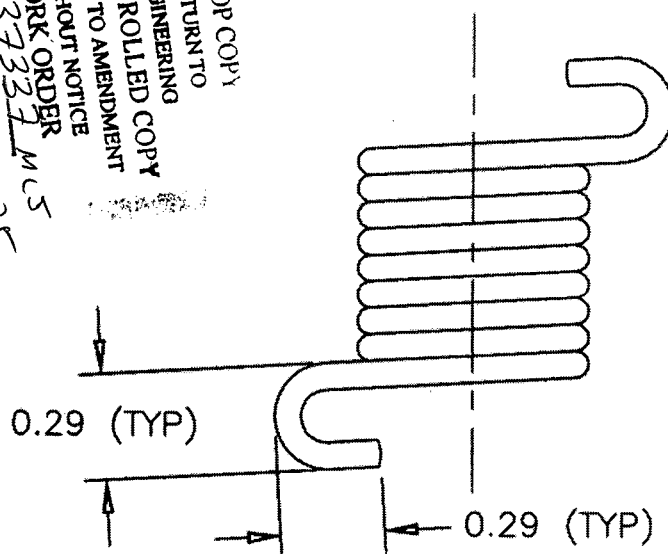


DESIGN BW	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED KE	APPROVED JH	DRAWING NO. D2535	REV. A SHEET 1 OF 1
DATE 99.04.08		TITLE SPRING SPEC CONTROL	SCALE 2:1
A	99.04.08	NEW ISSUE	

RELEASED
99.05.11 KE



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
137337 M.S
109-25



SPECIFICATION CONTROL DRAWING

TENSION SPRING WITH 8 COILS (NO GAP BETWEEN COILS)

MATERIAL: AISI STAINLESS STEEL $\phi 0.070$

POSSIBLE SUPPLIERS: VICTORIA SPRINGS, P/N .070SS TENSION SPRING

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29931**

Purchase Order Date 9/29/2015

PO Print Date 9/30/2015

Page Number 1 of 2

Order From :

VC-VIC002

Ship To : DART AEROSPACE LTD

VICTORY SPRING LTD.
#2 6104 - 82 AVE.
EDMONTON, AB T6B 0E7
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED \$

Contact Name

Vendor Phone 866 230 5312

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Terms

Net 30

Ship To PPhone

Currency

CAD

Ship Via:

FedEx Overnight collect

FOB

FCA - (Free Carrier)

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D2535P AS PER DWG D2535 REV. A B137337	Spring	10/19/2015 Yes 10/19/2015		50.00 / Each	\$4.74	\$237.00
Line Total:							\$237.00
2	D4008-9P AS PER DWG D4008 REV. E B137062	Spring	10/19/2015 Yes 10/19/2015		12.00 / Each <i>15/10/2015</i>	\$8.10	\$97.20
Line Total:							\$97.20

Note:

9/30/2015



convenient. consistent. correct.

PACKING SLIP

33691

#2, 6104 - 82 Ave
Edmonton, AB T6B 0E7
t + 780 442 4020
f + 780 466 8000

BILL TO:

Dart Aerospace Ltd
1270 Aberdeen Street
Hawkesbury, ON K6A, 1K7

SHIP TO:

16-Oct-15		29931			
50 12	VIC 1533 D4008-9P	D2535P Torsion Spring Splash Guard	15/10/20 50		
GST					
854454527	NET 30 DAYS				

CERTIFICATE OF CONFORMANCE

REPORT FOR : Dart Aerospace Ltd	DATE: 10/16/2015
PART/DRAWING #: D2535P / VIC 1533	PO # 29931
DESCR: Torsion Spring	QUANTITY: 50

VICTORY SPRING CERTIFIES BY THIS DOCUMENT THAT ALL OPERATIONS ARE DONE ACCORDING TO
DRAWINGS AND SPECIFICATIONS

CHARACTERISTIC	SPECIFIED	MEASURED	NOTES
Material type	SS 302	Yes	
Material diameter	0.070"	0.072"	
Coil I.D.	0.490"	0.489"	
Coil O.D.		0.635"	
Number of Coils	8.0 ref.	7.9	
Overall Length		1.115	
End Type	per drawing	yes	
Helix	RHW	RHW	

Mill Certificate attached: no
Material Heat Number: 35791

Inspected by: *Jeremy Burnowes*